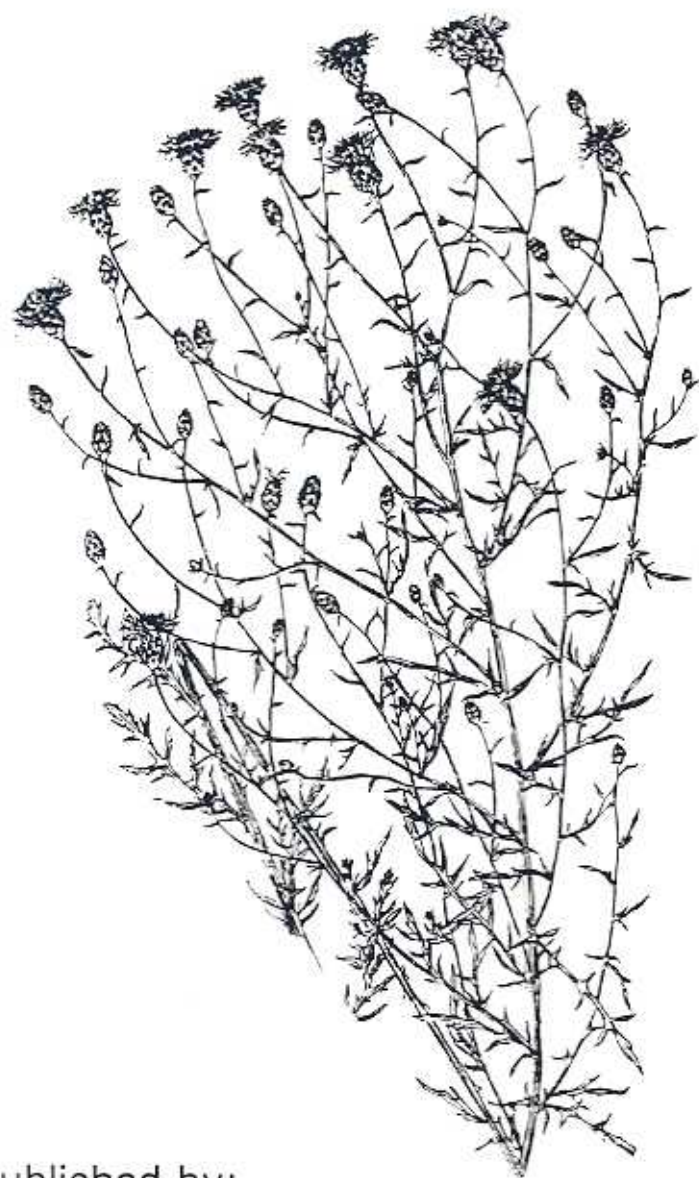


Selected Noxious Weeds in New Mexico



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Introduction/Preface

A man once said "that all weeds are either noxious or obnoxious". By definition, "a noxious plant means: plant(s) or part(s) thereof, with one or more of the following characteristics: it is aggressive, difficult to manage, detrimental, destructive, or poisonous; or is a carrier of insect or disease, or is parasitic or its direct or indirect effect is detrimental to the management of the desired ecosystem."

The management of noxious, or any other weeds, requires the correct identification and an understanding of the growth habits and reproductive characteristics. The purpose of this publication is to assist in the identification of several weeds, considered noxious, in the state. The weeds included are not native to the state, having moved into New Mexico from surrounding states, some are toxic and others are aggressive and difficult to manage.

Control options have not been included in this publication due to the frequent changes that occur in recommendations. Current control options can be obtained through several sources including the Cooperative Extension Service.

Acknowledgment

The development of this idea could not have been realized without the cooperative efforts of the New Mexico State Highway and Transportation Department and the New Mexico Cooperative Extension Service. The benefits of identification of noxious weeds in the state will be greatly enhanced through this publication.

References

- Whitson, T. et al. 1987. *Weeds and Poisonous Plants of Wyoming and Utah*. University of Wyoming Cooperative Extension Service, Laramie. 282 pp.
- Parker, K. L. 1982. *An Illustrated Guide to Arizona Weeds*. The University of Arizona Press, Tucson. 338 pp.

AFRICAN RUE (*Peganum harmala*)

MATURE ROADSIDE INFESTATION



MATURE PLANTS



FLOWER



AFRICAN RUE (*Peganum harmala*)

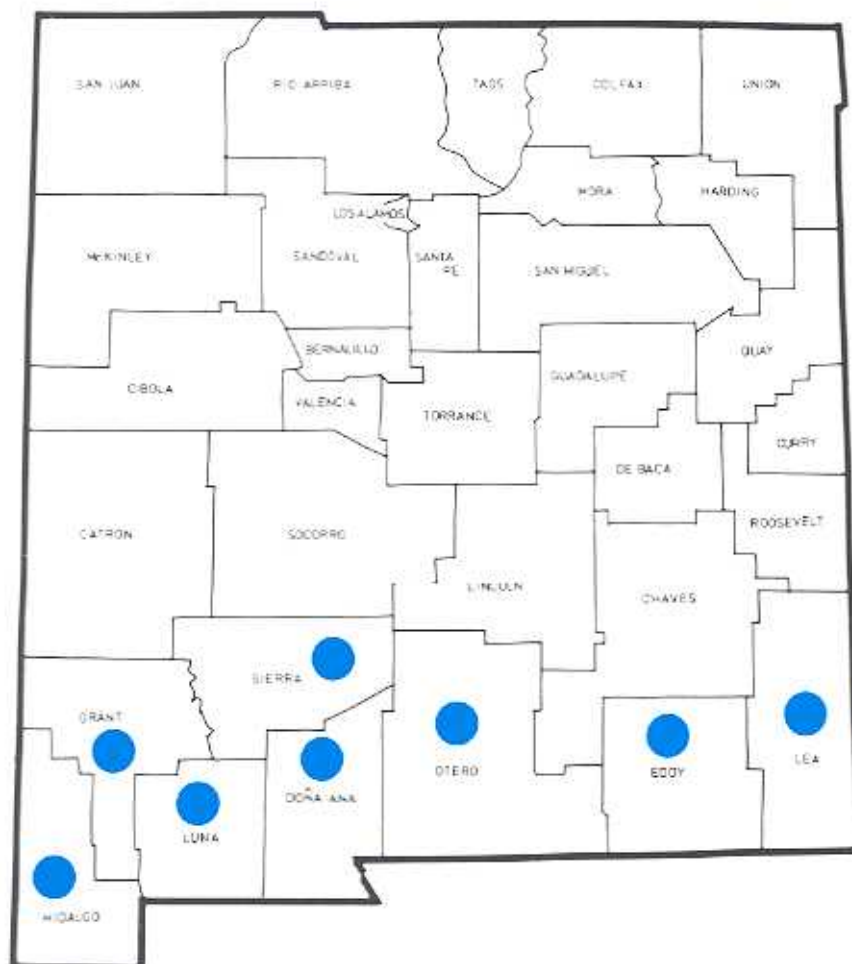
Description:

African rue is a much-branched perennial herb of the caltrop family. The alternate, finely dissected, succulent leaves are glabrous. The flowers have five white petals. The fruit is a two, three, or four-celled, many-seeded capsule.

History and Distribution:

African rue is a native of north African and Asiatic deserts. The first report of its presence in North America was in 1935 near Deming, New Mexico. It is found on salty clay, clay loam, and sandy soils. It is scattered throughout much of southern New Mexico and has spread to Texas and Arizona and has been reported in Oregon, Washington and Montana.

African rue has been proven to be poisonous by experimental feeding to domestic ruminants. The seeds are more toxic than the leaves or stems, with the younger leaves posing a greater problem than the mature leaves.



BLACK HENBANE (*Hyoscyamus niger*)

MATURE ROADSIDE INFESTATION



FLOWERING STRUCTURE



FLOWER



BLACK HENBANE (*Hyoscyamus niger*)

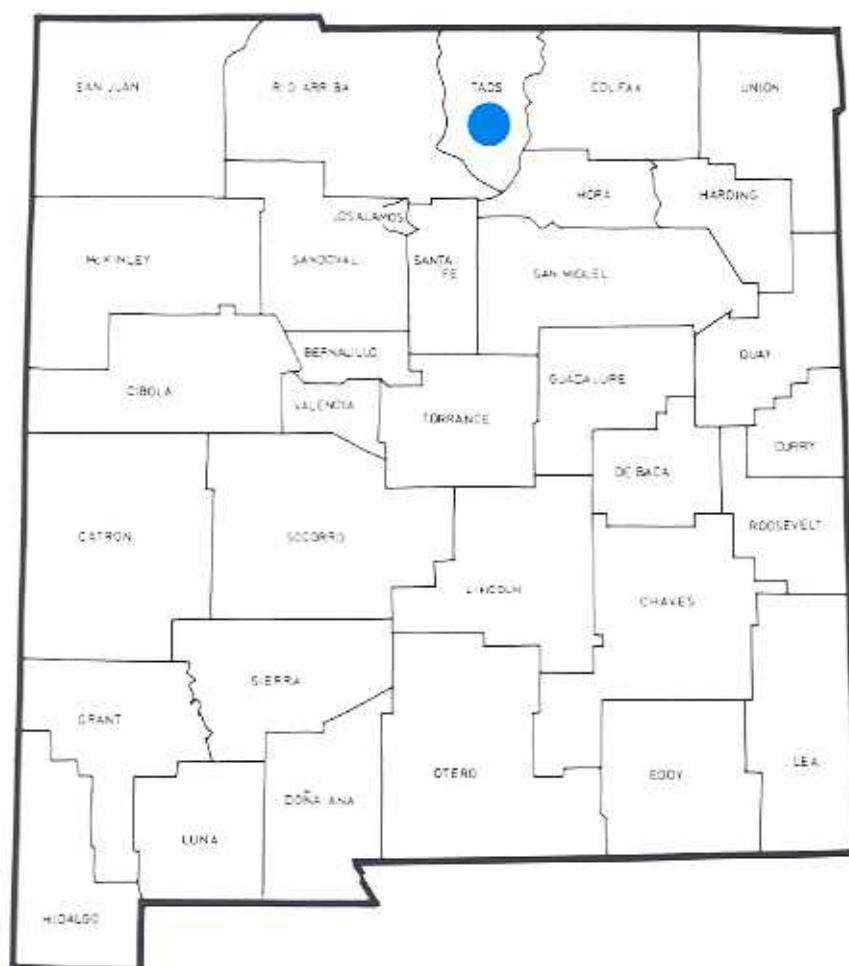
Description:

Black henbane is an annual or biennial herb with clammy, hairy, much branched stems that grow 1 to 3 feet tall. Leaves are coarsely-toothed, shallowly lobed, and covered with dense, short, sticky hairs. Foliage has a foul odor. The flowers are sessile and are found in the axils of upper leaves and are brownish-yellow in color with a purple center with purple veins.

History and Distribution:

Black henbane, a native of Europe, was introduced to the United States as an ornamental, and was released into roadsides, waste places and pastures. Black henbane contains tropane alkaloids that have caused occasional livestock poisoning. However, this plant is not usually grazed by animals and is consumed only when more palatable forage is not available.

Black henbane has been found only in Taos County with the major infestation being found 14.5 miles south of the Colorado border at the junction of highway 285 and BLM road 1041.



CANADA THISTLE (*Cirsium arvense*)

MATURE ROADSIDE PLANTS



SEEDLING PLANTS



FLOWERS



CANADA THISTLE (*Cirsium arvense*)

Description:

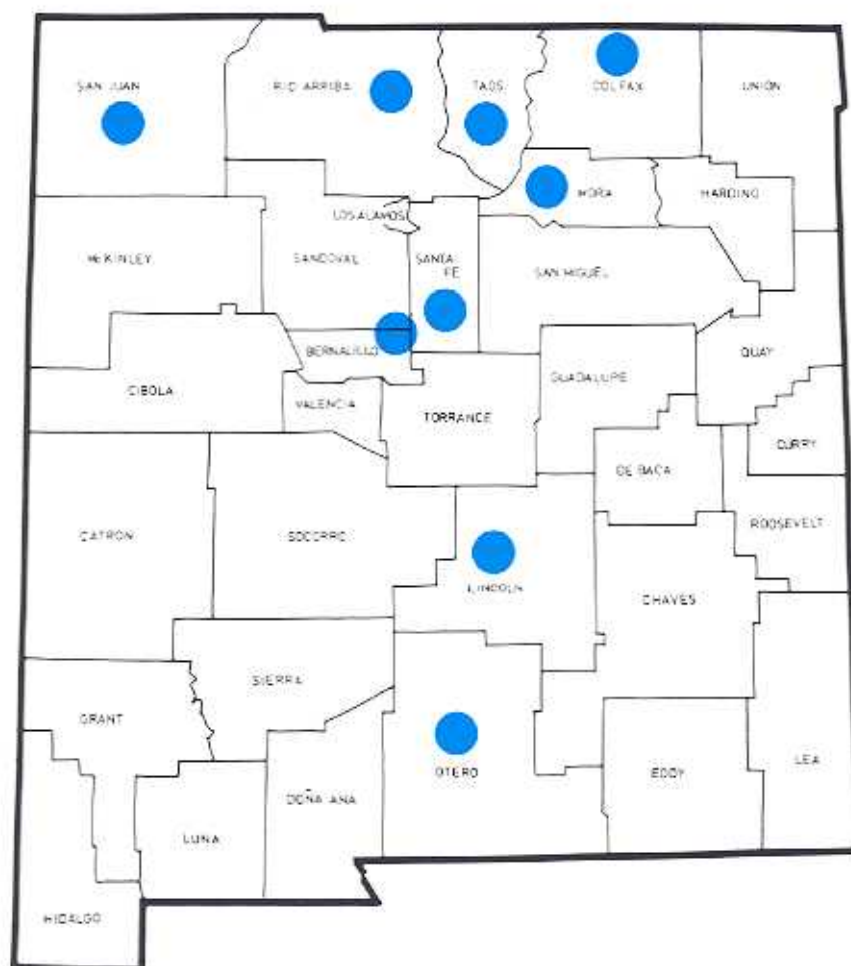
Canada thistle is a slender spiny-leaved perennial with rigid stems, 1 to 4 feet high. Reproducing by seed, and by its deep underground vertical and extensive horizontal roots which enable it to spread rapidly over large areas. These creeping roots are greatly branched, and may extend long distances, frequently giving rise to leafy shoots.

History and Distribution:

The small flaskedshaped flower heads are about 0.5 to 0.75 inches in diameter. Canada thistle differs from other species of the true thistle in that there are male and female flower heads, and these are on separate plants.

Canada thistle is a native of southeastern Eurasia. It was introduced to Canada as a contaminant of crop seed as early as the late 18th century.

Canada thistle has been found in the northern counties of the state and in the higher elevations of certain other counties.



JOINTED GOATGRASS (*Aegilops cylindrica*)

MATURE ROADSIDE INFESTATION



MATURE PLANTS



INDIVIDUAL SEEDHEAD



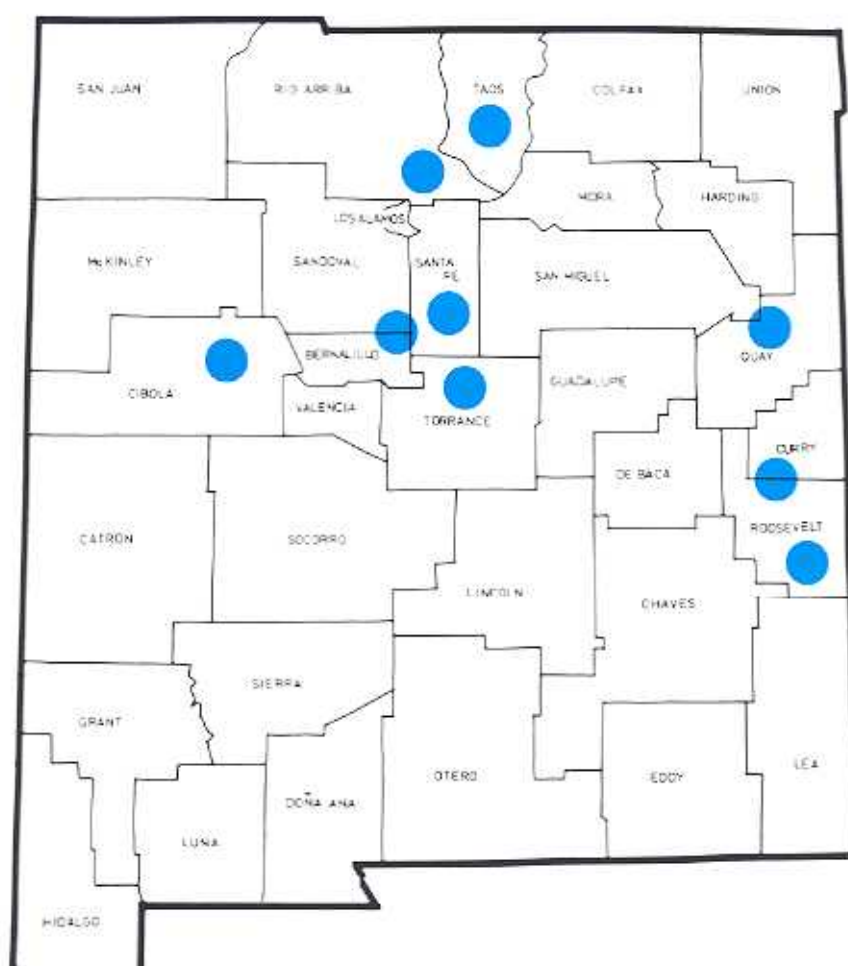
JOINTED GOATGRASS (*Aegilops cylindrica*)

Description:

Jointed goatgrass is a winter annual, 15 to 30 inches tall with erect stems that branch at the base giving the plant a tufted appearance. Leaves are alternate, simple with auricles at the base and a leaf blade 0.125 to 0.25 inches wide with hairs. The spike contains two to 12 spikelets which fit into the contour of the rachis. At maturity the spike falls intact and spikelets separate with a segment of the rachis still attached.

History and Distribution:

Jointed goatgrass is native to southern Europe and has been introduced and become established in most winter wheat growing areas of the United States. It is spread and introduced into new areas many times as a seed contaminant. Recent surveys have documented this plant in many counties in the state. This weed will probably be found to be more widespread as surveys continue.



LEAFY SPURGE (*Euphorbia esula*)

PASTURE INFESTATION



ROOT SYSTEM



FLOWERING STRUCTURE



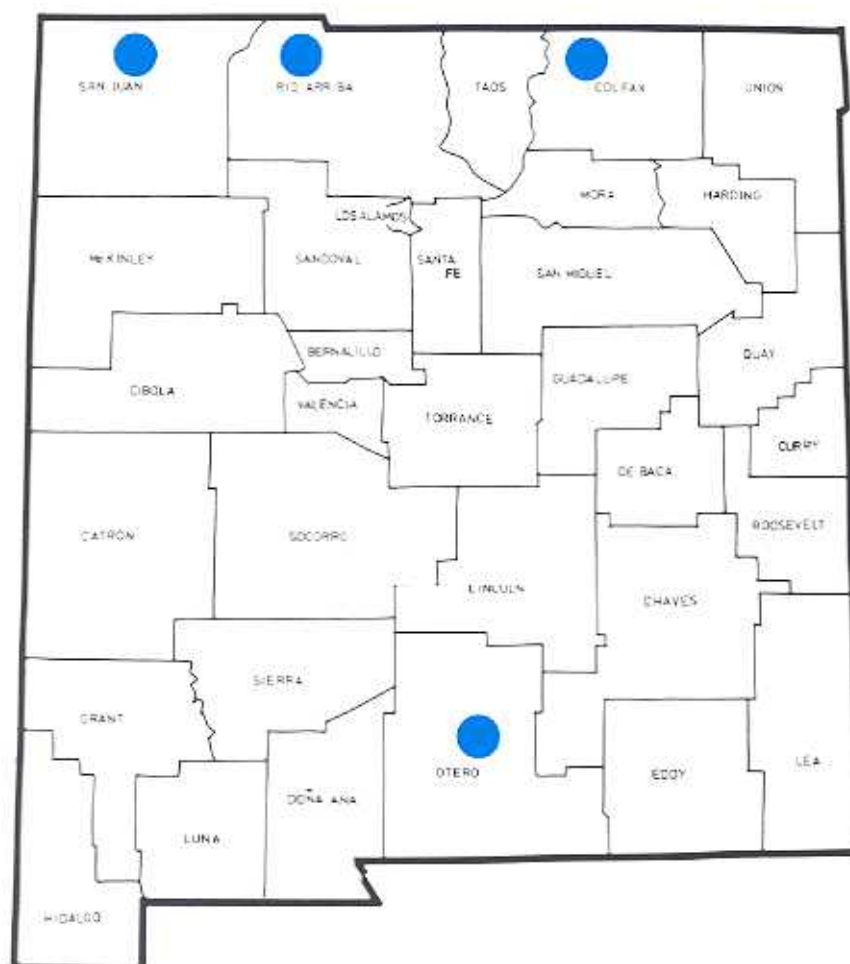
LEAFY SPURGE (*Euphorbia esula*)

Description:

Leafy spurge, a perennial which grows up to 3 feet tall, reproduces by vigorous rootstalks and seed. Leaves are narrow and 1 to 4 inches long. Stems are thickly clustered. Flowers are yellowish-green and are enclosed by paired heart-shaped bracts which are also yellow-green in color. Roots are brown, containing numerous pink buds which may produce new shoots or roots. The entire plant contains a milky sap.

History and Distribution:

Leafy spurge is native to Eurasia and was brought into the United States as a seed impurity about 1827. It has been reported to cause severe irritation of the mouth and digestive tract in cattle which may result in death. This plant has been found in several northern counties along with an isolated infestation in the southern portion of the state.



MUSK THISTLE (*Carduus nutans*)

MATURE ROADSIDE INFESTATION



MATURE INDIVIDUAL PLANT

ROSETTE



MUSK THISTLE (*Carduus nutans*)

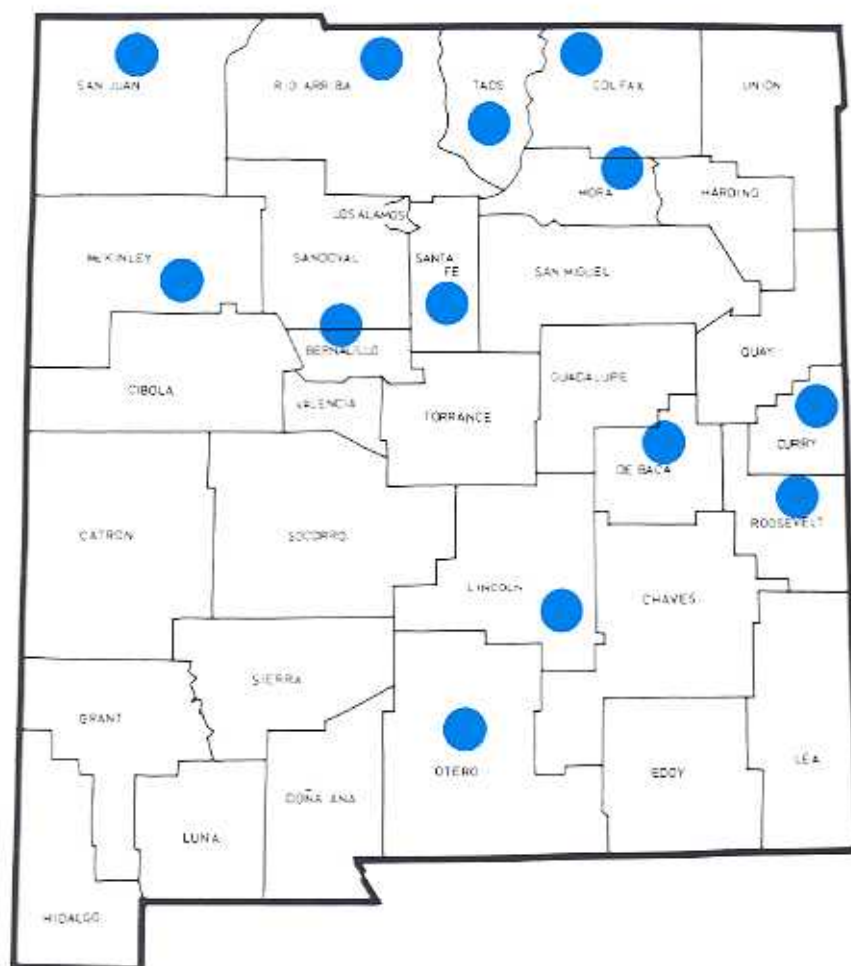
Description:

Musk thistle is biennial or sometimes a winter annual, which grows, in some cases, greater than seven feet tall. Leaves are dark green with a light green midrib, deeply lobed, and spiny margined. Flowers are solitary, 1.5 to 3.0 inches in diameter, and deep rose, violet, or purple, occasionally white, in color. They are subtended by long, narrow, spine-tipped bracts.

History and Distribution:

There are at least three species of this plant: *Carduus nutans*, *thoermeri* and *macrocephalus*. *Carduus nutans* and *Carduus thoermeri* are similar in appearance and have often been confused. It is generally thought that the *Carduus nutans* is the dominant species. The third species, *Carduus macrocephalus*, is found in Montana.

Musk thistle, a native to southern Europe and western Asia, was introduced into the United States in the early part of this century, and has become quite widespread throughout the U.S. and Canada. It has been found in the northern counties of the state and in the higher elevations of certain counties.



RUSSIAN KNAPWEED (*Centaurea repens*)

MATURE ROADSIDE INFESTATION



SEEDHEAD



FLOWER—NOTE BRACT



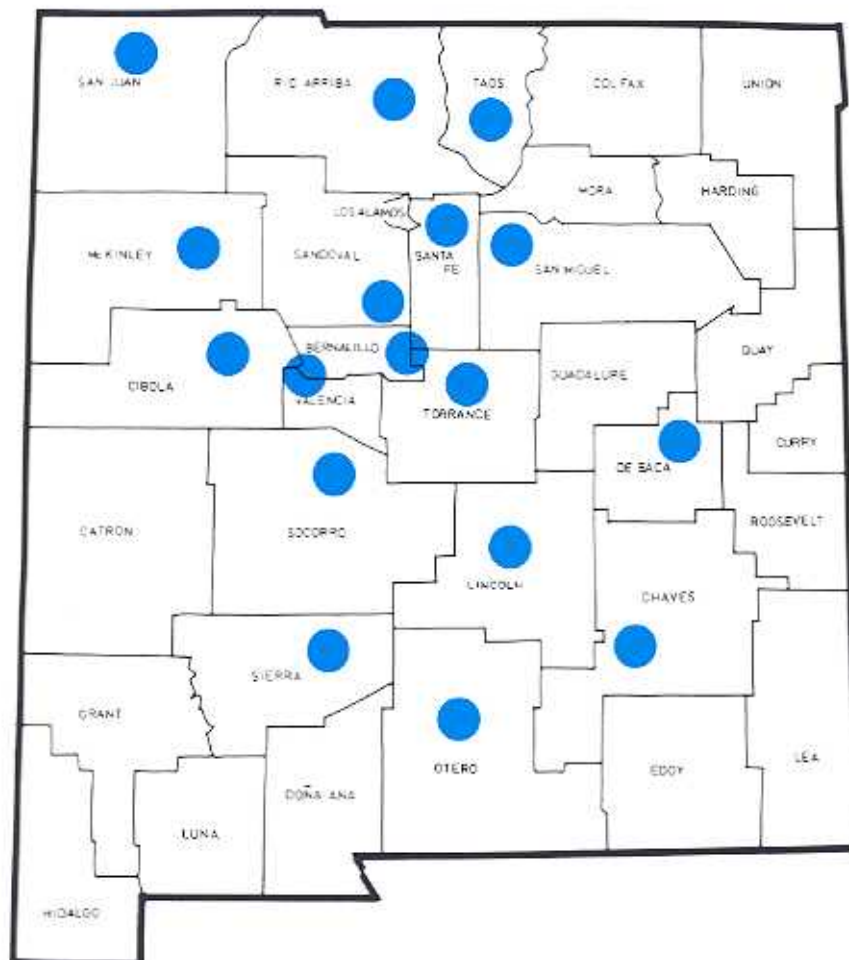
RUSSIAN KNAPWEED (*Centaurea repens*)

Description:

Russian knapweed is perennial, forming dense colonies by adventitious shoots from widely spreading black roots which penetrate to a depth of over 8 feet, and usually grows up to about 3.5 feet. Lower leaves are deeply lobed while the upper leaves are narrow. The cone-shaped flowering heads, 0.25 to 0.5 inches in diameter, are lavender-blue to pink in color, and are solitary at the ends of branches. The bracts that surround the base of the head are rounded, capped by a broad translucent tip.

History and Distribution:

Russian knapweed is native to Eurasia and was probably introduced to North America around the turn of the century. It is now widely established in the western U.S. As for the distribution within the state, Russian knapweed has been found in several counties of the state.



SCOTCH THISTLE (*Onopordum acanthium*)

MATURE ROADSIDE PLANT



ROSETTE



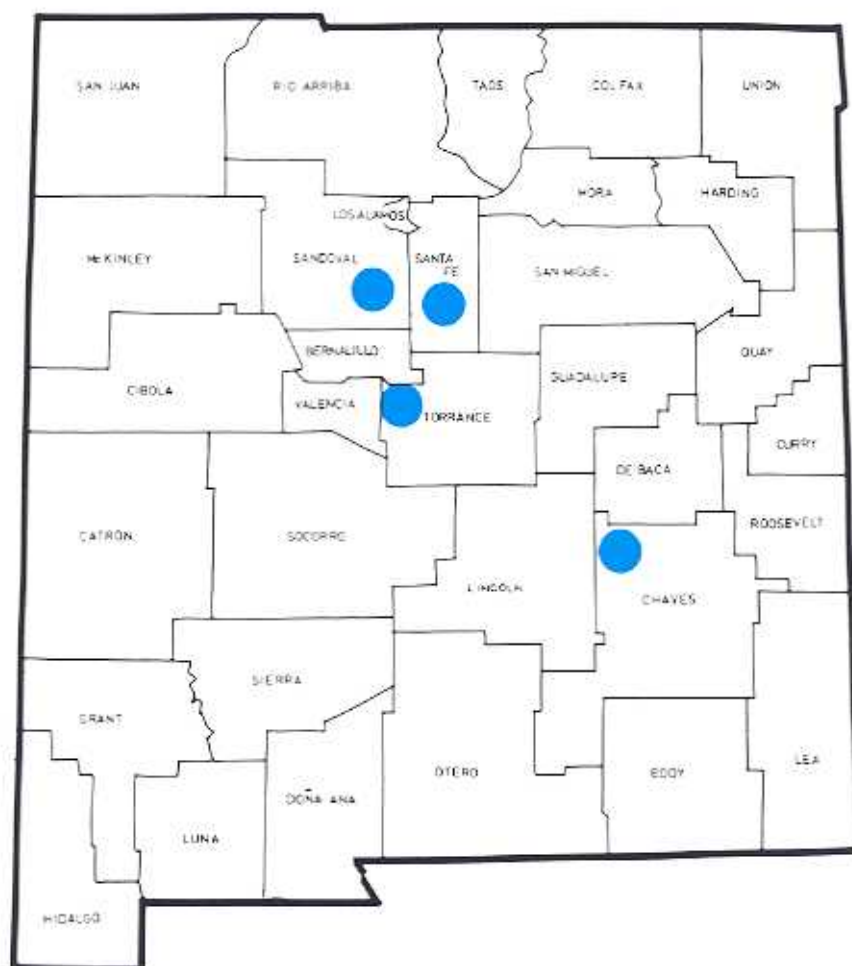
SCOTCH THISTLE (*Onopordum acanthium*)

Description:

Scotch thistle is a biennial that grows up to 8 feet tall. Stems have characteristically broad, spiny wings. Leaves are large, spiny, and covered with fine dense hair giving a grayish appearance. Flower heads, violet to reddish in color, are numerous, 1–2 inches in diameter, and have spine-tipped bracts.

History and Distribution:

Scotch thistle is native of Europe and eastern Asia and is now sparsely naturalized over much of the U.S. In the state of New Mexico, Scotch thistle has been locally found in only a few isolated areas, most of them small infestations.



SPOTTED KNAPWEED (*Centaurea maculosa*)

MATURE ROADSIDE INFESTATION



INDIVIDUAL PLANTS



FLOWER—NOTE BRACTS



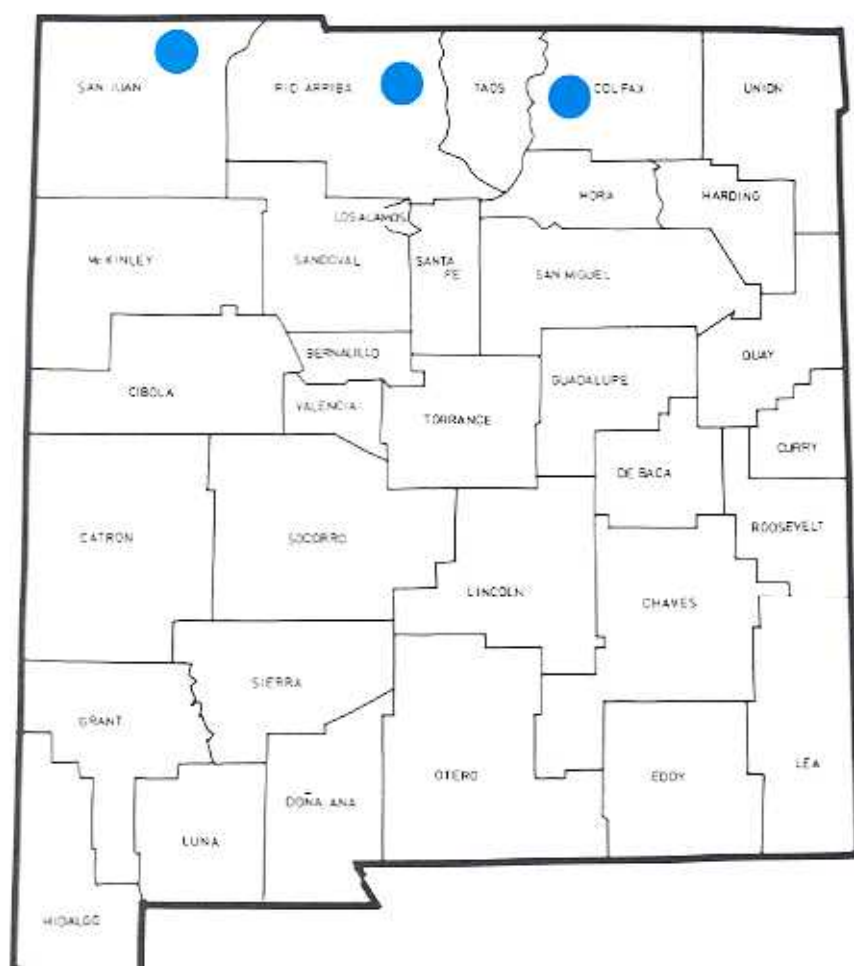
SPOTTED KNAPWEED (*Centaurea maculosa*)

Description:

Spotted knapweed is a biennial or short-lived perennial with a stout taproot. Stems are upright, most branching in the upper half and are up to 4 feet tall. The flowering heads are solitary at the ends of clustered branches. The involucre bracts of the head are tipped with a characteristic dark comblike fringe. The color of the lower is pinkish-purple.

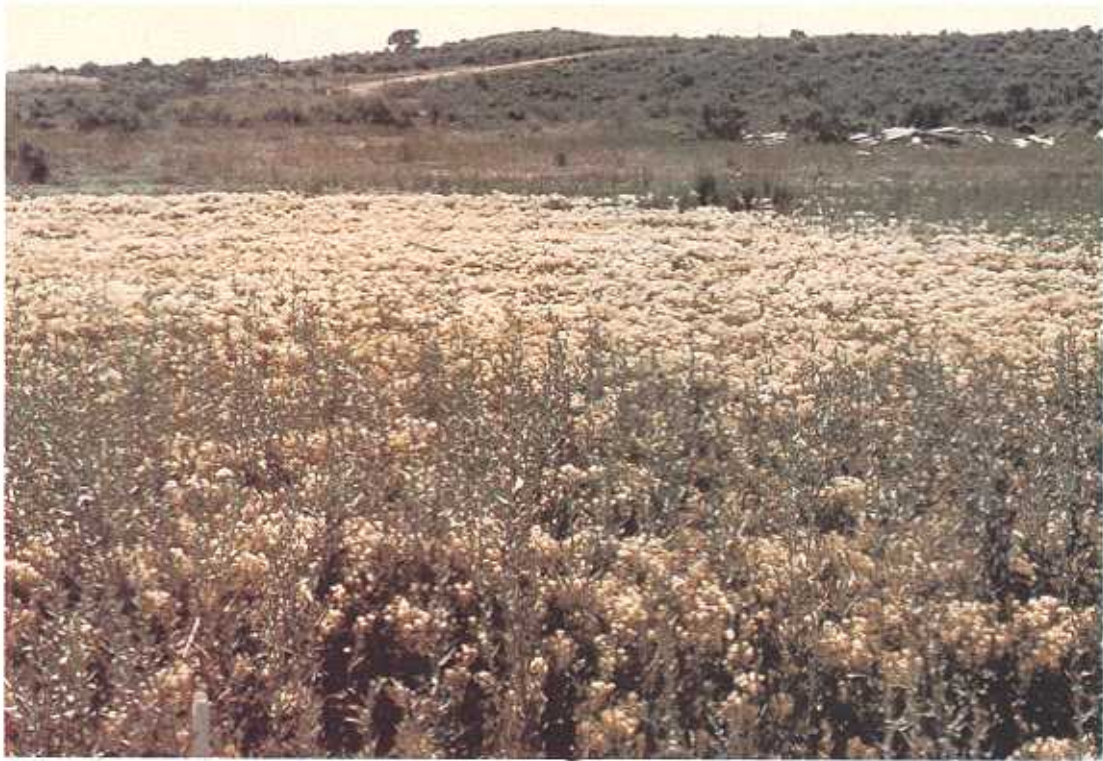
History and Distribution:

Spotted knapweed is native to central Europe. It appears to be best adapted to well-drained, light textured soils that receive summer rainfall. Its distribution in the state is known, at this present time, to be limited to only a couple of northern counties.



WHITETOP (*Cardaria draba*)

ROADSIDE INFESTATION



MATURE PLANTS



INDIVIDUAL PLANTS



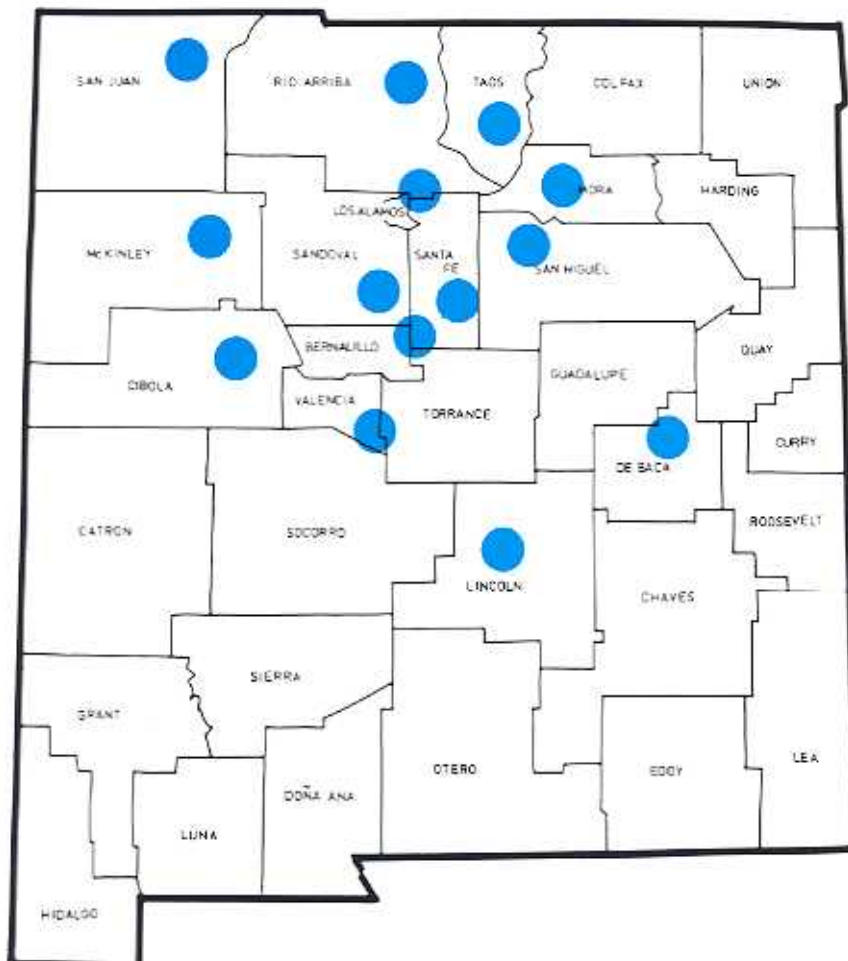
WHITETOP or HOARY CRESS (*Cardaria draba*)

Description:

Whitetop or Hoary Cress is a deep rooting perennial which grows up to 2 feet tall, reproduces by root segments and seeds, and has leaves which are blue-green in color. The lower leaves are stalked while the upper leaves have two lobes clasping the stem. The white flowers, having four petals, are dense and give the plant a white flat-topped appearance.

History and Distribution:

Whitetop, introduced from Europe and western Asia, forms large patches in cultivated fields, gardens, pastures, and roadsides. Within the state, whitetop has been found to be quite widespread. Another similar plant, Tall Whitetop or Perennial Pepperweed, has also been found in several counties.



WOOLLY-LEAF BURSAGE (*Franseria grayi*)

ROADSIDE INFESTATION



FLOWERING PLANT



SEEDLING PLANTS



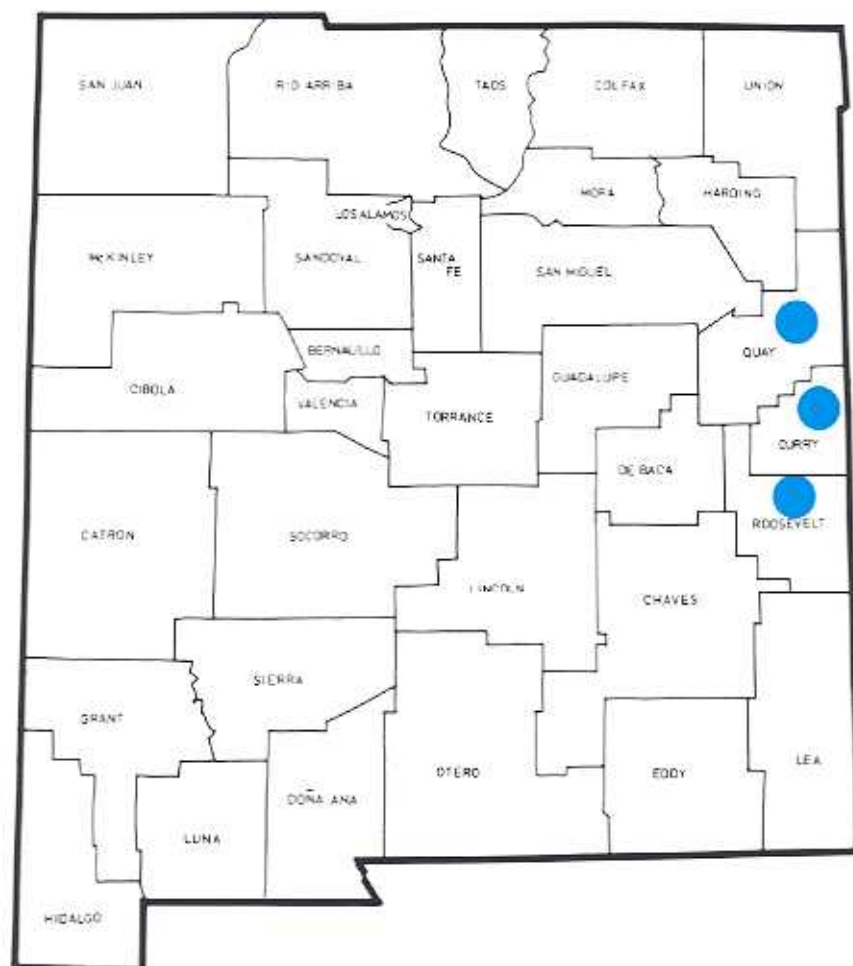
WOOLLY-LEAF BURSAGE or LAKEWEED (*Franseria grayi*)

Description:

Woolly-leaf Bursage or Lakeweed is a perennial with creeping rootstocks which grows up to 1.5 feet tall. The stems are branched and somewhat bushy. The upper surface of the leaves is smooth and green, while the lower surface of the leaves is covered with minute white hairs. The flowers are inconspicuous and green in color. Staminate flowers are found in solitary, elongated, terminal clusters with the pistillate flowers being formed in pairs in leaf axils.

History and Distribution:

This plant is a native of the plains region extending from the Missouri River westward. It grows in cultivated fields, pastures, and waste areas. It survives under varied soil moisture conditions. Its distribution within the state of New Mexico has been limited to just a couple of eastern counties, at the present.



YELLOW STARHISTLE (*Centaurea solstitialis*)

MATURE ROADSIDE INFESTATION



INDIVIDUAL PLANTS



FLOWER—NOTE BRACTS



YELLOW STARTHISTLE (*Centaurea solstitialis*)

Description:

Yellow starthistle is an annual or winter annual with a vigorous tap. The stems are upright, stiff, winged, branched, and grow up to 3.5 feet. Leaves at the base of the plant are divided into lobes with the end lobe being larger and rounder than the side lobes. The leaves found along the stem are linear, up to 4 inches long, 0.25 inches wide, and are tapered at the end. The flowering heads, solitary at the ends of the branches, are yellow in color, egg-shaped, and up to 0.75 inches long. A cluster of bracts surrounds the base of the head. The lower bracts have short spines, middle bracts end in a stiff, yellow, spreading spine 0.25 to 0.75 inches long.

History and Distribution:

Yellow starthistle is native to dry, open habitats in southern Europe but can grow on various soil types and is usually introduced on roadsides and waste areas. Rangeland infested by this plant is not utilized. This plant has been identified within the state in the southwestern regions in isolated infestations.

